

Mr. Al Reinhart
Superior Aluminum Alloy L.L.C.
14214 Edgerton Road
New Haven, IN 46774

Re: Significant Source Modification No:
003-11927-00286

Dear Mr. Reinhart:

Superior Aluminum Alloy L.L.C. applied for a Part 70 operating permit on October 15, 1999 for a secondary aluminum smelting operation. An application to modify the source was received on February 23, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction and operation at the source:

- (1) one (1) new natural gas-fired reverberatory furnace, identified as furnace #3, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by either baghouse E or baghouse F, and exhausting to stack E or F;
- (2) one (1) new natural gas-fired reverberatory furnace, identified as furnace #4, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by baghouse L and exhausting to stack L;
- (3) one (1) new natural gas-fired rotary furnace, identified as furnace M, with a maximum capacity of 6 tons of aluminum scrap per hour and a maximum heat input capacity of 12.0 million British thermal units per hour, with emissions controlled by baghouse L and exhausting to stack L; and
- (4) six (6) melt pot stands each with two natural gas-fired burners rated at 1.5 million British thermal units per hour each, identified as melt pot burners #13-24, with emissions uncontrolled.

The Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

Superior Aluminum Alloy L.L.C.
New Haven, Indiana
Permit Reviewer: Nisha Sizemore

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This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
If you have any questions on this matter call (800) 451-6027, press 0 and ask for Nisha Sizemore or extension (2-8356), or dial (317) 232-8356.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

nls

cc: File - Allen County
U.S. EPA, Region V
Allen County Health Department
Air Compliance Section Inspector - Jennifer Schick
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT

**Superior Aluminum Alloys L.L.C.
14214 Edgerton Road
New Haven, Indiana 46774**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 003-11927-00286	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) . The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary secondary aluminum smelting operation, which is one of the 28 listed source categories pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

Responsible Official: Al Reinhart
Source Address: 14214 Edgerton Road, New Haven, Indiana 46774
Mailing Address: 14214 Edgerton Road, New Haven, Indiana 46774
Phone Number: Mike Houlditch (219) 749-7599
SIC Code: 3314
County Location: Allen
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source under PSD;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (1) one (1) new natural gas-fired reverberatory furnace, identified as furnace #3, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by either baghouse E or baghouse F, and exhausting to stack E or F;
- (2) one (1) new natural gas-fired reverberatory furnace, identified as furnace #4, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by baghouse L and exhausting to stack L;
- (3) one (1) new natural gas-fired rotary furnace, identified as furnace M, with a maximum capacity of 6 tons of aluminum scrap per hour and a maximum heat input capacity of 12.0 million British thermal units per hour, with emissions controlled by baghouse L and exhausting to stack L; and
- (4) six (6) melt pot stands each with two natural gas-fired burners rated at 1.5 million British thermal units per hour each, identified as melt pot burners #13-24, with emissions uncontrolled.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and

- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

B.6 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAM, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

All monitoring and record keeping requirements not already legally required shall be implemented when operation begins. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (b) In the case of continuous opacity monitoring, whenever the continuous opacity monitor is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours or more, visible emission readings should be performed in accordance with 40 CFR 60, Appendix A, Method 9, beginning four (4) hours after the start of the malfunction or down time for a minimum of one (1) hour.
- (c) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
- (d) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.

- (e) The opacity readings during this period shall be reported in the quarterly Compliance Monitoring Reports, unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector within four (4) working hours.
- (f) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary opacity monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.11 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (c) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
 - (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
 - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.
- (c) IDEM, OAM reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this approval;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;

- (4) Records of preventive maintenance.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] the aluminum melting process, consisting of the following:

- (1) one (1) new natural gas-fired reverberatory furnace, identified as furnace #3, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by either baghouse E or baghouse F, and exhausting to stack E or F;
- (2) one (1) new natural gas-fired reverberatory furnace, identified as furnace #4, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by baghouse L and exhausting to stack L;
- (3) one (1) new natural gas-fired rotary furnace, identified as furnace M, with a maximum capacity of 6 tons of aluminum scrap per hour and a maximum heat input capacity of 12.0 million British thermal units per hour, with emissions controlled by baghouse L and exhausting to stack L; and
- (4) six (6) melt pot stands each with two natural gas-fired burners rated at 1.5 million British thermal units per hour each, identified as melt pot burners #13-24, with emissions uncontrolled.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- (1) The PM emissions from baghouses E and F (controlling reverberatory furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
- (2) The PM10 emissions from baghouses E and F (controlling reverberatory furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
- (3) The NOx emissions from reverberatory furnace #3 charging and melting shall not exceed 3.50 pounds per hour.
- (4) The PM emissions from baghouse L (controlling the new rotary furnace and the new reverberatory furnace #4) shall not exceed 1.204 pounds per hour.
- (5) The PM10 emissions from baghouse L (controlling the new rotary furnace and the new reverberatory furnace #4) shall not exceed 1.204 pounds per hour.
- (6) The NOx emissions from reverberatory furnace #4 charging and melting shall not exceed 3.50 pounds per hour.
- (7) The NOx emissions from the rotary furnace M shall not exceed 1.5 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply.

D.1.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the reverberatory furnaces #3 and #4 and rotary furnace M except when otherwise specified in 40 CFR Part 60, Subpart LLL.

D.1.3 Secondary Aluminum Smelting Limits [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1505, the following conditions shall apply to the reverberatory furnaces #3 and #4 and rotary furnace M:

- (1) Identification, emission limits and means of compliance shall be posted on the reverberatory furnaces #3 and #4 and rotary furnace M.
- (2) The PM emissions from each furnace shall not exceed 0.40 pounds per ton of feed.
- (3) The PM emissions from each furnace shall not exceed 10% opacity if PM compliance is via continuous opacity monitor.
- (4) The HCl emissions from each furnace shall not exceed 0.40 pounds per ton of feed.
- (5) The total polychlorinated dibenzofurans (D/F) emissions from each furnace shall not exceed 15 ug/Mg of feed.

D.1.4 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) emissions from each of the reverberatory furnaces #3 and #4 shall not exceed 24.0 pounds per hour when operating at a process weight rate of 14.0 tons of metal per hour.
- (b) The particulate matter (PM) emissions from each of the rotary furnace M shall not exceed 13.6 pounds per hour when operating at a process weight rate of 6.0 tons of metal per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 180 days after issuance of this permit, the Permittee shall perform PM and PM10 testing on baghouses E, F, and L, and NO_x, HCl, and D/F testing on each of the reverberatory furnaces #3, #4, and rotary furnace M, using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.1.1, D.1.3, and D.1.4. When testing baghouses E and F, all three reverberatory furnaces (#1, #2, and #3) shall be operated at 95% or more of their maximum design capacities. When testing baghouse L, the reverberatory furnace #4 and the rotary furnace M shall be operated at 95% or more of their maximum design capacities. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.7 Secondary Aluminum Smelting Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510 the following conditions shall apply to the reverberatory furnaces #3 and #4 and rotary furnace M:

- (1) The furnaces shall be controlled by baghouses with continuous lime injection system. The baghouses E or F for PM control shall be in operation and control emissions from the furnace #3 at all times when the furnace is in operation. It is acceptable to operate only one of the baghouses E or F if only one of the three reverberatory furnaces #1, #2, or #3 is operating. If two or more of the reverberatory furnaces #1, #2, and #3 are operating, then both baghouses E and F must be operated. Baghouse L shall be in operation and control emissions from the reverberatory furnace #4 and the rotary furnace M at all times when the furnaces are in operation.
- (2) The owner or operator must install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in §63.1506(c) and record the results of each inspection.
- (3) The owner or operator of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart must install, calibrate,

maintain, and continuously operate a bag leak detection system or a continuous opacity monitoring system.

- (A) These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.
- (i) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
 - (ii) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
 - (iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
 - (iv) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
 - (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
 - (vi) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
 - (vii) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
 - (viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
 - (ix) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
 - (x) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a

complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

- (B) These requirements apply to the owner or operator of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system.
 - (i) The owner or operator must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack.
 - (ii) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60.
- (4) The owner or operator must install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.
 - (A) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
 - (B) The accuracy of the weight measurement device must be ± 1 percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ± 1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.
 - (C) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
 - (D) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - (E) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
 - (i) Gaseous or liquid reactive flux other than chlorine; and
 - (ii) Solid reactive flux.
 - (F) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - (G) The owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating

cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

- (5) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of this part. The temperature monitoring device must meet each of these performance and equipment specifications:
 - (A) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
 - (B) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1512(n).
 - (C) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (6) The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:
 - (A) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or
 - (B) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or
 - (C) Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.
- (7) The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.
- (8) An owner or operator who intermittently adds lime to a lime coated fabric filter must obtain approval from the permitting authority for a lime addition monitoring procedure. The permitting authority will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.
- (9) The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or Fg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and

maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

- (10) Pursuant to 40 CFR Part 63.1510 the owner or operator must inspect the labels for each furnace at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.
- (11) The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:
 - (A) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - (B) A monitoring schedule for each affected source and emission unit.
 - (C) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.
 - (D) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
 - (E) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

- (F) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
 - (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (G) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (H) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan for each group 1 furnace not equipped with an add-on air pollution control device.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Visible Emissions Notations

- (a) Visible emission notations of the baghouse E, F, and L stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses E, F, and L used in conjunction with the furnaces, at least once per shift when any of the furnaces are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.10 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.11 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of the following operational parameters once per shift during normal operation when venting to the atmosphere:
 - (i) Inlet and outlet differential static pressure; and
 - (ii) Cleaning cycle: frequency and differential pressure.
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain records of the results of the inspections required under Condition D.1.10.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Secondary Aluminum Smelting Recordkeeping and Reporting Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510 the owner or operator shall

- (1) The owner or operator must submit initial notifications to the applicable permitting authority as described below.
 - (A) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or

operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

- (B) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.
- (2) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in §63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
- (A) All information required in §63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
 - (B) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
 - (C) Unit labeling as described in §63.1506(b), including process type or furnace classification and operating requirements.
 - (D) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
 - (E) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in §63.1506(c).
 - (F) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.1510(f).
 - (G) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
 - (H) Startup, shutdown, and malfunction plan, with revisions.

- (3) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:
 - (A) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (B) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (4) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.
- (5) A report must be submitted if any of these conditions occur during a 6-month reporting period:
 - (A) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
 - (B) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.
 - (C) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.
 - (D) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
 - (E) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3).
 - (F) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
 - (G) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (6) Each report must include each of these certifications, as applicable:
 - (A) For each thermal chip dryer: "Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period."
 - (B) For each dross-only furnace: "Only dross was used as the charge material in any dross-only furnace during this reporting period."

- (C) For each sidewell group 1 furnace with add-on air pollution control devices:
"Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period."
 - (D) For each group 2 furnace: "Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period."
 - (E) For each in-line fluxer using no reactive flux: "Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period."
- (7) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
 - (8) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
 - (A) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and
 - (B) All monitoring, recordkeeping, and reporting requirements were met during the year.
 - (9) As required by §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.
 - (A) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
 - (B) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - (C) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
 - (10) In addition to the general records required by §63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:
 - (A) For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:

- (i) If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (ii) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.
 - (iii) If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.
- (B) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:
 - (i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
 - (ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
 - (iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in §63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).
- (C) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
- (D) For each continuous monitoring system, records required by §63.10(c).

- (E) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
- (F) Operating logs for each group 1 sidewall furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewall and hearth during reactive flux injection and for adding reactive flux only to the sidewall or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.
- (G) Operating logs for each in-line fluxer using no reactive flux materials documenting each flux gas, agent, or material used during each operating cycle.
- (H) Records of all charge materials and fluxing materials or agents for a group 2 furnace.
- (I) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (J) Records of annual inspections of emission capture/collection and closed vent systems.
- (K) Records for any approved alternative monitoring or test procedure.
- (L) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (i) Startup, shutdown, and malfunction plan;
 - (ii) For major sources, OM&M plan; and
 - (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).
- (M) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name:	Superior Aluminum Alloy L.L.C.
Source Address:	14214 Edgerton Road, New Haven, Indiana 46774
Mailing Address:	14214 Edgerton Road, New Haven, Indiana 46774
Source Modification No.:	003-11927-00286

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Significant Source Modification to a Part 70 source

Source Name:	Superior Aluminum Alloy L.L.C.
Source Location:	14214 Edgerton Road, New Haven, IN 46774
County:	Allen
SIC Code:	3314
Operation Permit No.:	T003-11452-00286
Operation Permit Issuance Date:	not yet issued
Significant Source Modification No.:	003-11927-00286
Permit Reviewer:	Nisha Sizemore

On March 16, 2000, the Office of Air Management (OAM) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that Superior Aluminum Alloy L.L.C. had applied for a Significant Source Modification to a Part 70 source for the construction of three new furnaces. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 12, May 9, May 12, and May 15, 2000, Lori Kyle Endris, attorney representing the City of New Haven, submitted comments on the proposed permit. A summary of the comments is as follows:

Comment #1

The City has several concerns regarding the facility's operational practices. First, the applicant began construction of its furnaces, identified as furnaces #3, #4, and M, prior to receiving its interim permit to construct. According to Jennifer Dorn, the facility's inspector, this failure to abide by the IDEM's regulations is being forwarded to the Office of Enforcement for formal action.

Response #1

The OAM believes that there has been a misunderstanding between Jennifer Dorn and Lori Kyle Endris. The misunderstanding could possibly have occurred because Jennifer Dorn did refer Superior Aluminum to enforcement recently; however the alleged violation is not that Superior Aluminum began constructing the emission units listed in this permit prior to receiving their interim construction permit. The alleged violation is that Superior Aluminum has been operating the facilities listed in permit CP 003-9243, issued May 1, 1998, prior to receiving their operation validation letter. The OAM, Office of Enforcement will review this referral and take appropriate action.

The interim permit to construct the emission units listed in this permit, was issued on March 16, 2000. Jennifer Dorn, the inspector for Allen County, did an informal site inspection on January 13, 2000 and determined that Superior Aluminum had not yet begun construction of any of the equipment listed in this permit. Therefore, the OAM has no evidence that Superior Aluminum began construction prior to receiving their interim permit. There has been no referral to enforcement for construction without a permit.

Comment #2

The facility receives numerous and continuous opacity and odor complaints (the most recent known to the City having occurred Monday, April 10, 2000) as well as incurs malfunctions to its baghouses and the disposal of the bag's contents, which as you know, constitutes hazardous waste).

Photographs have been submitted showing the areas of concern. Specifically, there is constantly a whitish plume coming from the two vents on the left (referring to photographs). With these photographs, along with maps of the facility, I am hopeful that you will be able to determine which furnaces or emission units are causing the problems and require increased controls for those units.

Response #2

Superior Aluminum has a permit for furnaces #1 and #2, six melt pot stands, the scrap shredder, and the scrap dryer. This permit includes a malfunction condition, which requires that all malfunctions be reported to OAM. Superior Aluminum has reported five baghouse malfunctions since the issuance of that permit. Pursuant to 326 IAC 1-2-39, the definition of a malfunction is any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. Some of these malfunction reports that Superior Aluminum submitted, were submitted only because the source shutdown one compartment of a baghouse to perform maintenance. Based on the definition of a malfunction, shutting down a compartment of a baghouse to perform maintenance is not really a malfunction because the pollution control device did not fail. Also, no excess emissions are expected to be generated from these type of activities. Jennifer Dorn, the inspector for Allen County, intends to give Superior Aluminum some instructions regarding the submission of malfunction reports, including when one should be submitted. In response to the actual malfunctions that the source has incurred, the OAM has required the source to prepare preventive maintenance plans. The OAM has reviewed and approved these plans and expects that the source will have fewer malfunctions in the future.

Since Superior Aluminum is subject to the Title V program, the OAM has added the following condition in this new permit in order to address an emergency situation. Baghouse malfunctions would still have to be reported pursuant to this rule.

B.6 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.**
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:**

 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;**
 - (2) The permitted facility was at the time being properly operated;**
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or**

other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;**

**Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967**

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:**

**Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015**

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;**
- (B) Any steps taken to mitigate the emissions; and**
- (C) Corrective actions taken.**

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.**
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.**
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.**
 - (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(10) be revised in response to an emergency.**

- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.**
- (g) Operations may continue during an emergency only if the following conditions are met:**
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.**
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:**
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and**
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.**

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

The two stacks referenced in the photographs are for the charging and melting emissions from the existing reverberatory furnaces #1 and #2. This permit does not effect the existing furnaces #1 and #2. These furnaces were permitted under CP 003-9243 issued May 1, 1998. Pursuant to that permit, stack tests for particulate matter (PM) emissions were required for these furnaces. The stack tests were conducted on February 16, 1999. The results were an average emission rate of 1.38 pounds of PM per hour compared to an allowable PM limit of 1.204 pounds of PM per hour. Superior Aluminum retested the furnace in March, 1999 with results of 0.53 pounds of PM per hour. The existing permit for furnaces #1 and #2 requires the source to monitor the visible emissions from these stacks in order to ensure compliance with the opacity limits. The permit also requires the source to monitor the baghouses controlling these furnaces to ensure that the baghouses operate properly. Monitoring of baghouse pressure drop is required every day that the furnaces are in operation.

The proposed new furnaces will utilize some of the existing baghouses as well as a new baghouse. This permit increases the frequency of the required baghouse monitoring from once per day to once per shift (see below for changes to Conditions D.1.9 and D.1.12). This permit also requires the source to inspect all of their baghouses quarterly. The permit also requires PM and PM10 testing on baghouses E, F, and L and NOx, HCl, and D/F testing on each of the reverberatory furnaces #3, #4, and rotary furnace M. Since the new furnaces are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart RRR, the existing baghouses controlling these new furnaces, as well as the existing furnaces #1 and #2, will be subject to all of the monitoring, record keeping, and reporting requirements contained in the new rule. Such increased monitoring should increase the effectiveness of the baghouses and decrease the number of malfunctions which occur because of baghouse failure.

If excess visible emissions are observed, complaints can be directed to Jennifer Dorn, Air Compliance

Inspector at (317) 233-5674. The OAM does not have any authority to regulate odor.

The following change has been made to the permit.

D.1.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses E, F, and L used in conjunction with the furnaces, at least once ~~daily~~ **per shift** when the furnaces are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain ~~daily~~ records of the following operational parameters **once per shift** during normal operation when venting to the atmosphere:
 - (i) Inlet and outlet differential static pressure; and
 - (ii) Cleaning cycle: frequency and differential pressure.
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain records of the results of the inspections required under Condition D.1.10.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment #3

The facility is in a territory that effective December 31, 2000, will no longer receive the City of New Haven/Adams Township's fire and emergency service due to the amount of calls and expense to the City for its past services. The facility will have to contract with one of the surrounding volunteer units which neither have the training nor the level of service offered by the City. Due to the facility's past history, it is of great concern to the City that the facility have conditions placed in its operation permit to address any fire and/or emergency contingency (i.e. hazardous material problems) that may occur after December 31, 2000.

Please include the following language in the permit:

"The source shall prepare and submit an emergency management plan no later than sixty (60) days following the issuance of the permit. The source shall provide the department with proof that it has implemented the emergency management procedures within the facility no later than

sixty (60) days following the issuance of the permit and that its employees receive no less than annual training to effectuate the procedures. The source shall provide the department with proof that it has arranged for competent emergency management services in its service area no later than sixty (60) days following the issuance of the permit."

Response #3

The OAM has no authority to regulate where or how the facility receives local fire and emergency services. However, the New Haven fire department has informed IDEM's Office of Emergency Response (OER) that Superior Aluminum will continue to receive fire and emergency service from the City of New Haven/Adams Township, even after December 31, 2000. According to them, Jefferson Township and Adams Township have a contract such that the New Haven fire department will provide fire and emergency service to a portion of Jefferson Township, which includes Superior Aluminum. The Mayor of New Haven has also confirmed to the OAM that Superior Aluminum will continue to receive fire and emergency service from the City of New Haven/Adams Township, even after December 31, 2000.

Regardless of whether the source is receiving fire and emergency service from the City, Indiana Fire Code requires that fire departments respond to any emergency involving hazardous materials. Additionally, IDEM's Office of Emergency Response (OER) would respond, as well as the local Health Department and/or the County Emergency Management Agency. Environmental emergencies are required to be reported to IDEM, (OER) by calling the spill line at (888) 233-7745. Pursuant to 327 IAC 2-6, spills of hazardous substances to soil or water are required to be reported. The Clean Air Act Title III-Superfund Amendments and Authorization Act (SARA) requires hazardous chemical releases to be reported. These are also reported by calling OER's spill line. These are also required to be reported to the Local Emergency Planning Committee. As an example, a chlorine release of an amount greater than ten (10) pounds is considered a hazardous chemical release and is required to be reported.

Once an environmental emergency has been reported to IDEM, OER, the OER will contact the local Health Department or the County Emergency Management Agency to respond to the emergency. In Allen County, the Emergency Management Agency responds to emergencies 24 hours per day. OER will also respond if necessary. If the emergency involves a spill, the responder will ensure that the spill is contained if possible and also require the source to clean up the spill. If the emergency involves a chemical release to the air, the EPA may do air monitoring to assess the impact to the local environment. Superior Aluminum Alloys has reported one (1) environmental emergency to OER since they began operation. In March 1999, they reported a spill of 100 pounds of baghouse dust, which is considered a hazardous waste material. Superior Aluminum was required to clean up the spill. The baghouse malfunction was reported to OAM's Compliance Branch.

For more information about environmental emergencies, call OER's spill line during normal business hours, 8:00 am to 4:00 p.m., Monday through Friday. Outside of normal business hours, the spill line is only for reporting emergencies. For more information about the Allen County Emergency Management Agency, call (219) 449-7684. For copies of rules regarding spills, go to <http://www.state.in.us/idem/lawregs.html>. Then download the Article 2 rules regarding water quality standards. The spill rules are contained in the Article 2 rules at 2-6-1.

The rules referenced above, regarding environmental emergencies, are not listed in this permit because this permit only addresses requirements pursuant to air rules. The rules regarding environmental emergencies are part of the water and hazardous waste pollution programs. Even though these rules are not listed in this permit, Superior Aluminum must still comply with them.

Superior Aluminum is subject to one air pollution rule regarding accidental releases of hazardous

chemicals. They are subject to the requirements of 40 CFR 68 which requires a Risk Management Plan to be developed. This rule only applies to sources at which a regulated substance listed in 40 CFR 68.130 is present in more than the threshold quantity listed in 40 CFR 68.130. Superior Aluminum is subject to this rule because chlorine, which one of the substances listed in 40 CFR 68.130, is present at this source in amounts greater than 2500 pounds. The rule requires the source to conduct a hazard assessment, implement prevention steps, develop and implement an emergency response program, and develop and implement a management system to oversee the implementation of the risk management program elements. This rule also requires that such a source have its employees attend training emphasizing safety and health hazards, emergency operations including shutdown, and safe work practices applicable to each employee's job tasks. Superior Aluminum has submitted a Risk Management Plan which addresses chlorine. However, the following condition has been added to the final permit to ensure continuous compliance with the requirements of the rule. All subsequent conditions in Section C of the permit have been renumbered accordingly.

C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or**
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and**
- (c) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.**

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

On May 19, 2000, Terry E. McDonald, Mayor of the City of New Haven, submitted comments on the proposed permit. A summary of the comments are as follows:

Comments

I received a letter from Attorney Lori Kyle Endris dated April 12, 2000 concerning the permit for fire protection for Superior Aluminum. At its meeting on May 18, 2000, the New Haven Adams Township Fire Governing Body went into agreement with Jefferson Township Trustee, Ron Hakes, to provide fire coverage for a portion of Jefferson Township, which would include Superior Aluminum. On behalf of the New Haven Adams Township Fire Department, I would ask that Superior Aluminum coordinate and provide emergency response protocol to our local Fire Department along with continued cooperation with fire inspections on a regular basis. I have spoken with Mr. Bill Bean of Superior Aluminum, and feel that he is more than cooperative with our efforts to provide fire and EMS protection for his company and employees.

On May 23, 2000, Terry E. McDonald, Mayor of the City of New Haven, submitted comments on the proposed permit. A summary of the comments are as follows:

Comments

This letter will amplify my prior letter of May 19, 2000, the purpose of which was to inform your office that the agreement for fire protection to unincorporated Jefferson Township had been renewed for the calendar year 2001. My letter of May 19, 2000, should not be construed as a withdrawal of the request for draft language previously submitted by Lori Kyle Endris, attorney representing the City of New Haven. The letter should also not be construed as an acknowledgment that existing safety protocols are acceptable to the New Haven Adams Township Fire Governing Board.

The City of New Haven and the New Haven Adams Township Fire Governing Board believe it important that a safety protocol be established concerning injuries requiring medical treatment and safety related incidents, including explosions, fire, and releases of hazardous materials. I believe that injuries requiring medical treatment and safety related incidents, including explosions, fire, and releases of hazardous materials, should be required to be reported, not only to the State Agency with jurisdiction, but also to the local fire department and/or EMS.

Response to both comments

The OAM does not have the authority to require that certain safety protocols be established or to require that the Source report injuries and safety related incidents to the local fire department and/or EMS. The local fire governing board, the Allen County Emergency Management Agency, and/or the Indiana Occupational Safety and Health Agency (OSHA) are the appropriate respondents for these comments concerning safety and injury. The Allen County Emergency Management Agency can be contacted by telephone at (219) 449-7684. The Indiana Occupational Safety and Health Agency (OSHA) can be contacted by telephone at (800) 356-4674.

Also, please see the response to comment #3 from Lori Kyle Endris, concerning the language that the City requested the OAM include in the permit.

Upon further review, the OAM has decided to make the following changes to the permit. Additions are shown in bold and deletions are shown with a strikeout.

- (1) Condition B.2 has been revised for clarification.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, ~~any the~~ applicable definitions found in **the statutes or regulations** (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

- (2) Condition C.2 (Preventive Maintenance Plan) has been modified as shown below. Language has been added to clarify that the PMP and the PMP extension request do not need to be certified by the responsible official. "Preventive Maintenance Plans" has been replaced with "PMPs" throughout the condition, since it has already been defined. In C.2(c) language was added that says the source has a reasonable time to provide a PMP when IDEM, OAM requests it.

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; **and**
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the ~~Preventive Maintenance Plans~~ **PMPs** as necessary to ensure that failure to implement ~~the Preventive Maintenance Plans~~ **a PMP** does not cause or contribute to a violation of any limitation on emissions or potential to emit.
 - (c) **A copy of the PMP's** shall be submitted to IDEM, OAM, upon request **and within a reasonable time**, and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its ~~Preventive Maintenance Plans~~ **PMPs** whenever lack of proper maintenance causes or contributes to any violation. **The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).**
- (3) Condition C.3 (Permit Amendment or Modification) (a) has been modified as shown below. It has been revised so that a source cannot be liable for both a TV permit violation and a rule violation. By changing this language we are merely referencing the requirements and not mandating compliance with it.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) ~~The Permittee must comply with~~ **Permit amendments and modifications are governed by** the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (4) Condition C.4 (Opacity) has been modified to be consistent with the rule.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions **Alternative Opacity Limitations**), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a

continuous opacity monitor) in a six (6) hour period.

- (5) Condition C.7 (Performance Testing) has been rearranged for clarity. Language has also been added to indicate that the test protocol and the notification of the test date do not require certification by the responsible official.

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. ~~The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.~~ **The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

- (b) **The Permittee shall notify IDEM, OAM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

- ~~(b)~~(c) **Pursuant to 326 IAC 3-6-4(b), all** test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

~~The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

- (6) Condition C.8 (Compliance Monitoring) has been revised to clarify that new emission units must begin compliance monitoring upon start-up.

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

~~Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance~~ **when operation begins. If required by Section D,** the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. ~~If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Management~~

~~100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.~~

~~The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

- (7) Condition C.9 (Maintenance of Monitoring Equipment) has been re-titled (Maintenance of Emission Monitoring Equipment). For clarification, this condition is applicable not only for CEM's, but also for any monitoring equipment.

C.9 Maintenance of **Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

- (a) In the event that a breakdown of the **emission** monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (8) The following new condition has been added to the permit as Condition C.10. All subsequent conditions have been renumbered appropriately.

C.10 Maintenance of **Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

- (a) In the event that a breakdown of the **continuous opacity monitoring equipment** occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (b) In the case of **continuous opacity monitoring**, whenever the **continuous opacity monitor** is malfunctioning or will be down for repairs or adjustments for a period of **four (4) hours or more**, visible emission readings should be performed in accordance with **40 CFR 60, Appendix A, Method 9**, beginning **four (4) hours** after the start of the malfunction or down time for a minimum of **one (1) hour**.
- (c) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
- (d) **Method 9 opacity readings shall repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.**
- (e) The opacity readings during this period shall be reported in the quarterly

Compliance Monitoring Reports, unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector within four (4) working hours.

- (f) **The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary opacity monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.**

- (9) Condition C.12 renumbered C.13 (Compliance Monitoring Plan - Failure to Take Response Steps) has been revised to clarify the intent.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. **The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the** This compliance monitoring plan is comprised of are:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

- (A) **Reasonable** response steps that ~~may~~ **will** be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

- (B) A time schedule for taking **reasonable** ~~such~~ response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, ~~appropriate~~ **reasonable** response steps shall be taken when indicated by the provisions of that compliance monitoring condition. ~~Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan to take reasonable response steps shall constitute a violation of the permit. unless taking the response steps set forth in the Compliance~~

~~Response Plan would be unreasonable.~~

- (c) ~~After investigating the reason for the excursion,~~ **Upon investigation of a compliance monitoring excursion,** the Permittee is excused from taking further response steps for any of the following reasons:
- (1) ~~The monitoring equipment malfunctioned, giving a false reading.~~ **A false reading occurs due to the malfunction of the monitoring equipment.** This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned **or is returning** to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) **All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.**
- (f) **If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.**
- (1) **At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.**
 - (2) **Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.**
- (10) Condition C.13 renumbered C.14 (Actions Related to Noncompliance Demonstrated by a Stack Test) has been revised as follows.
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]
-
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a

description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize **excess** emissions from the affected facility while the corrective actions are being implemented. ~~IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.~~

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. ~~Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.~~
- (c) **IDEM, OAM reserves the authority to take any actions allowed under law in response to noncompliant stack tests.**

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (11) Condition C.14 (Monitoring Data Availability) has been incorporated into C.13 (Compliance Monitoring Plan- Failure to Take Response Steps). All subsequent conditions in Section C have been renumbered appropriately.

~~C.14 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]~~

- ~~(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.~~
- ~~(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.~~
- ~~(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.~~
- ~~(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.~~
- ~~(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.~~
- ~~(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.~~

- (12) Condition C.15 (General Record Keeping Requirements) has been revised to be more consistent with the rules and to assure that the source is allowed a "reasonable time" to produce records no matter how or when the OAM may ask for them. Parts of C.15(c)(4) have been deleted because most of it is enforcement related and is not necessary to be in the permit. Everything else in (c)(4) that was deleted, which is not enforcement related, is covered in other conditions.

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years ~~and available upon the request of an IDEM, OAM, representative.~~ The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a ~~written~~ request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
- (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance. ~~shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.~~
- (13) Condition C.16 (General Reporting Requirements) (c) has been revised so that it is clear the

reports it refers to are the ones required by section D. C.16(d) has been revised to clarify that we base reporting periods on calendar year, not on when the permit is issued. For example if a source is issued a permit in February, they need to submit their first quarterly report in March.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (c) Unless otherwise specified in this permit, any semi-annual report **required in Section D of this permit** shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. **Reporting periods are based on calendar years.**

(14) Condition D.1.4 (Particulate Matter) has been modified to more accurately reflect the rule.

D.1.4 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) emissions from each of the reverberatory furnaces #3 and #4 shall not exceed 24.0 pounds per hour when operating at a process weight rate of 14.0 tons of metal per hour.
- (b) The particulate matter (PM) emissions from each of the rotary furnace M shall not exceed 13.6 pounds per hour when operating at a process weight rate of 6.0 tons of metal per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation ~~and extrapolation~~ of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

(15) Condition D.1.6 (Testing Requirements) has been revised as shown below. Language has been added to clarify that testing should be done in accordance with Section C- Performance Testing. The condition has also been changed to clarify that PM10 includes filterable and condensible PM10 and that testing will also show compliance with Condition D.1.4.

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, the Permittee shall perform PM and PM10 testing on baghouses E, F, and L, and NOx, HCl, and D/F testing on each of the reverberatory furnaces #3, #4, and rotary furnace M, using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.1.1, ~~and D.1.3, and D.1.4~~. When testing baghouses E and F, all three reverberatory furnaces (#1, #2, and #3) shall be operated at 95% or more of their maximum design capacities. When testing baghouse L, the reverberatory furnace #4 and the rotary furnace M shall be operated at 95% or more of their maximum design capacities. **PM10 includes filterable and condensible PM10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. Testing shall be conducted in accordance with Section C- Performance Testing.**

- (16) The choice of affidavit has been added to the Certification form.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Significant Source Modification.

Source Background and Description

Source Name:	Superior Aluminum Alloy L.L.C.
Source Location:	14214 Edgerton Road, New Haven, IN 46774
County:	Allen
SIC Code:	3314
Operation Permit No.:	T003-11452-00286
Operation Permit Issuance Date:	not yet issued
Significant Source Modification No.:	003-11927-00286
Permit Reviewer:	Nisha Sizemore

The Office of Air Management (OAM) has reviewed a modification application from Superior Aluminum Alloy L.L.C. relating to the construction of the following emission units and pollution control devices:

New Emission Units

- (1) one (1) new natural gas-fired reverberatory furnace, identified as furnace #3, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by either baghouse E or baghouse F, and exhausting to stack E or F;
- (2) one (1) new natural gas-fired reverberatory furnace, identified as furnace #4, with a maximum capacity of 14 tons of aluminum scrap per hour, a maximum heat input capacity of 28.0 million British thermal units per hour, and a maximum chlorine flux of 10233 pounds per eight-hour charge, with emissions controlled by baghouse L and exhausting to stack L;
- (3) one (1) new natural gas-fired rotary furnace, identified as furnace M, with a maximum capacity of 6 tons of aluminum scrap per hour and a maximum heat input capacity of 12.0 million British thermal units per hour, with emissions controlled by baghouse L and exhausting to stack L; and
- (4) six (6) melt pot stands each with two natural gas-fired burners rated at 1.5 million British thermal units per hour each, identified as melt pot burners #13-24, with emissions uncontrolled.

Existing Emission Units (permitted by CP003-9243-00286, issued on May 1, 1998)

- (1) one (1) natural gas-fired reverberatory furnace, identified as furnace #1, with a maximum capacity of 14 tons of aluminum scrap per hour and a maximum heat input capacity of 28.0 million British thermal units per hour, with emissions controlled by either baghouse E or baghouse F, and exhausting to stack E or F;
- (2) one (1) natural gas-fired reverberatory furnace, identified as furnace #2, with a maximum capacity of 14 tons of aluminum scrap per hour and a maximum heat input capacity of 28.0 million British thermal units per hour, with emissions controlled by either baghouse E or baghouse F, and exhausting to stack E or F;
- (3) one (1) scrap shredder, with a maximum capacity of 12.5 tons of scrap per hour, with emissions controlled by a baghouse;
- (4) one (1) scrap dryer, with a maximum capacity of 6 tons of scrap per hour, and a maximum heat input capacity of 6 million British thermal units per hour, with emissions controlled by a baghouse and a thermal oxidizer; and
- (5) six (6) melt pot stands each with two natural gas-fired burners rated at 1.5 million British thermal units per hour each, identified as melt pot burners #1-12, with emissions uncontrolled.

History

On February 23, 2000, Superior Aluminum Alloy L.L.C. submitted an application to the OAM requesting to add additional furnaces to their existing plant. At the same time an interim permit to construct the furnaces was also submitted. The source has a permit CP003-9243, issued on May 1, 1998 for the existing facilities listed above. The source is voluntarily accepting emission limits to maintain their status as a PSD minor source.

Superior Aluminum Alloy L.L.C. has submitted a Part 70 permit application on October 15, 1999. A notice of administrative completeness was mailed to the source on December 6, 1999.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
E and F	reverberatory furnaces #1, #2, and #3 charge and melt	40	3.83	60,000	125
J	reverberatory furnace #3 holding area	50	3 x 3.17	20,000	1600
K	reverberatory furnace #4 holding area	50	3 x 3.17	20,000	1600
L	reverberatory furnace #4 and	40	3.83	60,000	125

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 23, 2000.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	2834
PM-10	1556
SO ₂	36.9
VOC	34.5
CO	31.6
NO _x	38.7

HAP's	Potential To Emit (tons/year)
antimony	less than 10
arsenic	less than 10
beryllium	less than 10
cadmium	less than 10
chlorine	less than 10
chromium	less than 10
hydrogen chloride	greater than 10
lead	less than 10
manganese	less than 10
mercury	less than 10
nickel	less than 10
selenium	less than 10
polychlorinated dibenzofurans total (D/F)	less than 10
polychlorinated dibenzo-p-dioxins total	less than 10
TOTAL	greater than 25

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(g) because it increases the potential to emit of all criteria pollutants by greater than 25 tons per year. This Significant Source Modification is approval to construct and operate the three furnaces.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	34.97
PM-10	34.97
SO ₂	89.92
VOC	52.14
CO	8.07
NOx	93.92

This existing source is not a major stationary source because even though it is one of the 28 listed source categories, each attainment regulated pollutant is limited to an emission rate of less than 100 tons per year.

These emissions are based upon the technical support document provided with permit CP 003-9243-00286 issued May 1, 1998.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. Since the source prefers to maintain their existing status as a PSD minor source, the table below shows the limited emissions for all of the emission units at the source, including existing units as well as the new proposed emission units. There are no changes being made to the emission limits for the existing emission units. The source is a major source of hazardous air pollutants. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
reverberatory furnace #1 charge and melt	5.27	5.27	3.29	5.48	0.00	20.50	14.77
reverberatory furnace #1 holding	1.40	1.40	0.074	0.67	10.3	0.27	0.00
reverberatory furnace #1 casting	0.00	0.00	0.73	5.11	0.00	0.37	0.00
reverberatory furnace #2 charge and melt	5.27	5.27	3.29	5.48	0.00	20.50	14.77
reverberatory furnace #2 holding	1.40	1.40	0.074	0.67	10.3	0.27	0.00
reverberatory furnace #2 casting	0.00	0.00	0.73	5.11	0.00	0.37	0.00
shredder	1.48	1.48	0.00	0.00	0.00	0.00	0.00
dryer	18.34	18.34	1.84	8.41	6.62	23.65	71.64
melt pot burners #1-12	0.9	0.9	0.047	0.43	6.62	0.17	0.00
roadways (existing prior to modification)	0.23	0.05	0.00	0.00	0.00	0.00	0.00
Total for existing emissions	34.29	34.11	10.08	31.36	33.84	66.1	101.18
reverberatory furnace #3 charge and melt	(1)	(1)	3.29	5.48	0.00	9.13	14.77
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs

reverberatory furnace #3 holding	1.40	1.40	0.074	0.67	10.3	0.078	0.00
reverberatory furnace #3 casting	0.00	0.00	0.73	5.11	0.00	0.37	0.00
reverberatory furnace #4 charge and melt	5.27	5.27	3.29	5.48	0.00	9.13	14.77
rotary furnace charge and melt	(2)	(2)	23.65	3.94	0.00	6.57	0.00
rotary furnace heating	(2)	(2)	0.032	0.29	4.42	0.12	0.00
reverberatory furnace #4 holding	1.40	1.40	0.074	0.67	10.3	0.078	0.00
reverberatory furnace #4 casting	0.00	0.00	0.73	5.11	0.00	0.37	0.00
rotary furnace casting	0.00	0.00	0.53	3.68	0.00	0.26	0.00
melt pot burners #13-24	0.90	0.90	0.047	0.43	6.6	0.17	0.00
roadways (new)	0.23	0.05	0.00	0.00	0.00	0.00	0.00
Total for new facilities	9.2	7.62	32.43	30.86	31.64	26.28	29.54
Total for entire source	43.49	41.73	42.51	62.22	65.48	92.38	130.72

The limited potential to emit from the entire source is less than 100 tons per year for any criteria pollutant; therefore, this source is a minor PSD source even after the construction of these new facilities. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Note: The applicant has chosen to accept limits that are lower than the required 99 tons per year to render PSD not applicable because the applicant expects to make more expansions to the plant at a later date.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

- (b) The reverberatory furnaces #3 and #4 and the rotary furnace M are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63, Subpart RRR). These regulations have been proposed and finalized; however these standards are yet to be published in the federal register. Even so, these standards are applicable to the reverberatory furnaces #3 and #4 and the rotary furnace M upon startup. Following is a summary of the requirements:
- (1) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart RRR.
 - (2) Identification, emission limits and means of compliance shall be posted on all affected sources and emission units.
 - (3) The furnaces shall be controlled by baghouses with continuous lime injection system.
 - (4) A bag leak detector system shall be installed in accordance with "Fabric Filter Bag Leak Detection Guidance" or a continuous opacity monitor shall be installed and operated.
 - (5) A reactive flux injection rate monitoring system shall be installed and operated.
 - (6) A baghouse inlet temperature monitoring system shall be installed and operated.
 - (7) The PM emissions shall not exceed 0.40 pounds per ton of feed.
 - (8) The PM emissions shall not exceed 10% opacity if PM compliance is via continuous opacity monitor.
 - (9) The HCl emissions shall not exceed 0.40 pounds per ton of feed.
 - (10) The total polychlorinated dibenzofurans (D/F) emissions shall not exceed 15 ug/Mg of feed.
 - (11) A scale or scales with an accuracy of plus or minus 1% shall be installed and utilized to record the weight of each charge and of the reactive flux injection rate.
 - (12) An operations, malfunction, and maintenance plan shall be developed for the emission capture and collection system, charge monitoring system, PM control systems, reactive flux injection system, baghouse inlet temperature monitoring system.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable and in order that the entire source maintain minor PSD status, the emissions from the existing and new emission units shall be limited as follows:

- (1) The PM and PM10 emissions from baghouses E and F (controlling reverberatory furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
- (2) The NOx emissions from reverberatory furnace #3 charging and melting shall not exceed 3.50 pounds per hour.

- (3) The PM and PM10 emissions from baghouse L (controlling the new rotary furnace and the new reverberatory furnace #4) shall not exceed 1.204 pounds per hour.
- (4) The NOx emissions from reverberatory furnace #4 charging and melting shall not exceed 3.50 pounds per hour.
- (5) The NOx emissions from the rotary furnace M shall not exceed 1.5 pounds per hour.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable.

326 IAC 6-3-2 (Process Operations)

Pursuant 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the various processes shall not exceed an amount determined by the appropriate equation specified below.

The limitations for these facilities were calculated using the following equation

$$E = 4.1 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The limits for the various facilities are as follows:

Processes	Process Weight Rate (P) (tons/hour)	Allowable Emissions (E) (lbs/hour)
reverberatory furnace #3	14	24.0
reverberatory furnace #4	14	24.0
rotary furnace M	6	13.6

Based on baghouse characteristics the facilities can comply with 326 IAC 6-3-2 (Process Operations).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The furnaces have applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of the baghouses E, F, and L stack exhausts shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (b) The Permittee shall record the total static pressure drop across each the baghouses E, F, and L controlling the furnaces, at least once daily when each of the furnaces is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 to 4.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.
 - (c) An inspection shall be performed each calendar quarter of all bags controlling the furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
 - (d) In the event that bag failure has been observed.
 - (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (e) Within 180 days after startup of the new furnaces, the Permittee shall perform stack tests as shown in the table below using methods as approved by the

Commissioner. PM-10 includes filterable and condensible PM-10. When testing baghouses E and F, all three reverberatory furnaces (#1, #2, and #3) shall be operated at 95% or more of their maximum design capacities. When testing baghouse L, the reverberatory furnace #4 and the rotary furnace M shall be operated at 95% or more of their maximum design capacities.

Facilities to be tested	Pollutants to test
baghouses E and F	PM, PM10
reverberatory furnaces #3 and 4 charging and melting, and rotary furnace	NOx, HCl, and D/F
baghouse L	PM, PM10

These monitoring conditions are necessary because the baghouse for the melting process must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 003-11927-00286.